

CLAIM AMENDMENTS:

Please amend Claims 23, 25, and 28 as follows:

1.-22. (Canceled)

23. (Currently Amended) An image pickup element formed on a single semiconductor chip, comprising:

a pixel area including an arrangement of a plurality of blocks, each block including at least two photo-detection elements;

a plurality of output lines which output, in parallel at the same time, signals of all of the photo-detection elements included in the block; and

an operation section which receives as inputs, in parallel and in relation to one of said blocks to be subjected to operation, the signals of corresponding predetermined ones of said plurality of blocks which are outputted in parallel from said plurality of output lines, wherein said operation section performs an interpolation processing to interpolate a predetermined signal using signals other than the predetermined signal.

24. (Previously Presented) An image pickup element according to claim 23, wherein said pixel area includes a plurality of partial pixel-areas arranged two-dimensionally in horizontal and vertical directions, and wherein each of the plurality of partial pixel-areas includes photodetectors arranged two-dimensionally in the horizontal and vertical directions,

wherein said image pickup element further comprises a memory which stores signals of a plurality of lines of the photodetectors arranged in the horizontal direction, and a selecting circuit which reads out the signals in parallel from the memory to said plurality of output lines on a partial pixel-area basis.

25. (Currently Amended) An image pickup element formed on a single semiconductor chip, comprising:

a pixel area including an arrangement of a plurality of blocks, each block including at least two photo-detection elements;

a plurality of output lines which output, in parallel at the same time, signals of all of the photo-detection elements included in the block; and

an operation section which receives as inputs, in parallel and in relation to one of said blocks to be subjected to operation, the signals of corresponding predetermined ones of said plurality of blocks which are outputted in parallel from said plurality of output lines, wherein said operation section performs a compression processing.

26. (Previously Presented) An image pickup element according to claim 25, wherein said pixel area includes a plurality of partial pixel-areas arranged two-dimensionally in horizontal and vertical directions, and wherein each of the plurality of partial pixel-areas includes photodetectors arranged two-dimensionally in the horizontal and vertical directions,

wherein said image pickup element further comprises a memory which stores signals of a plurality of lines of the photodetectors arranged in the horizontal

direction, and a selecting circuit which reads out the signals in parallel from the memory to said plurality of output lines on a partial pixel-area basis.

27. (Previously Presented) An image pickup element according to claim 25, wherein the compression processing includes a discrete cosine transform.

28. (Currently Amended) An image pickup element formed on a single semiconductor chip, comprising:

a pixel area including an arrangement of a plurality of blocks, each block including at least two photo-detection elements;

a plurality of output lines which output, in parallel at the same time, signals of all of the photo-detection elements included in the block; and

an operation section which receives as inputs, in parallel and in relation to one of said blocks to be subjected to operation, the signals of corresponding predetermined ones of said plurality of blocks, originating from the signals outputted in parallel from said plurality of output lines, wherein said operation section performs edge-emphasis processing.

29. (Previously Presented) An image pickup element according to claim 28, wherein said pixel area includes a plurality of partial pixel-areas arranged two-dimensionally in horizontal and vertical directions,

wherein each of the plurality of partial pixel-areas includes photodetectors arranged two-dimensionally in the horizontal and vertical directions, and

wherein said image pickup element further comprises a memory which stores signals of a plurality of lines of the photodetectors arranged in the horizontal direction, and a selecting circuit which reads out the signals, in parallel, from the memory to said plurality of output lines on a partial pixel-area basis.